

2004-2006 WORK PROGRAM

TRANSPORTATION ASSET MANAGEMENT COUNCIL



Carmine Palombo, Chair
Richard Deuell
John Kolessar
Jerry Richards
Kirk Steudle
Steven Warren

Tom Wieczorek, Vice-Chair
Aaron Hopper
William McEntee
Susan Mortel
Eric Swanson

May 2004

TRANSPORTATION ASSET MANAGEMENT COUNCIL
WORK PROGRAM
May 2004-May 2006

Approved by the State Transportation Commission, April 29, 2004

I. SURVEYING AND REPORTING ROAD & BRIDGE CONDITIONS

A. Conduct an annual pavement condition rating using the PASER methodology on the federal-aid eligible system for at least two more years. (In process; complete by January 2006)

- A1. Determine data to be collected
- A2. Determine software to be used
- A3. Develop training program
- A4. Conduct training sessions
- A5. Determine data collection schedule
- A6. Conduct data collection activities
- A7. Review and test data for accuracy
- A8. Report data to TAMC staff
- A9. Staff review and analysis of data
- A10. Preliminary presentation to TAMC
- A11. Verification of data
- A12. Presentation of results to State Transportation Commission (STC)
- A13. Return data to local agencies by February 1.
- A14. Prepare summary report to TAMC
- A15. Review previous year's activities and modify as needed

B. Investigate and demonstrate other road rating methods, including those being used by various transportation agencies in Michigan. Compare the cost, efficiency, and reliability of those methods to PASER. Determine if equivalency tables can be used to report consistent ratings across the state. (Complete by January 2006)

- B1. Data Management Committee determines scope of study
- B2. RFP drafted and presented to committee for review
- B3. TAMC reviews and approves RFP
- B4. RFP advertised
- B5. Proposals reviewed by staff and recommendation to Data Management Committee
- B6. TAMC approves proposal and requests approval from STC
- B7. Draft contract and submit for approval to Commission Audit, Attorney General, Finance
- B8. Need Ad Board approval (if for more than \$25,000)
- B9. Contract awarded
- B10. Contract administered, including monthly updates to committee
- B11. Contract completed

C. Assess the current method of rating and managing bridges in comparison to other potential methodologies. (Complete by July 2005)

- C1. Review and report to committees various methods of rating and managing bridges.

- C2. Committees recommend method of rating and managing bridges to the Transportation Asset Management Council
- C3. Council determines method to be used for reporting bridge condition.
- D. Demonstrate the cost and efficiency of conducting road and bridge condition ratings on the non-federal aid eligible system. Studies should include demonstrating the use of PASER and other available rating methods and should also address the procedures and reliability of sampling. (Start July 2004; complete by January 2006)**
 - D1. Data Management Committee determines scope of study and process to be used [pilot studies or as part of normal MPO/RPA activities] [This should include data to be collected, data rules to be followed, reporting requirements, etc.]
 - D2. Develop draft study proposal for review by committee
 - D3. [If the decision is to contract out the work then use same RFP process as indicated above.]
 - D4. Begin testing

II. ASSESSING COMPLETED AND PLANNED INVESTMENTS

- A. Identify and define the data elements necessary to determine annual investments in roads and bridges for all road agencies. Data items should be identified that are required for statewide reporting as well as those that are required for implementation of baseline tools and procedures at the individual agency level. (Complete by September 2004)**
 - A1. Staff reviews common data requirements in current models used by agencies in Michigan and report to Data Management and Strategic Analysis Committees. This should include information by improvement category.
 - A2. Committees review report and select data that should be included for statewide analysis
 - A3. Committees review report and select data that should be included for local analysis
 - A4. Data for local analysis submitted to local agencies for review and refinement, if necessary
 - A5. TAMC finalizes data elements
- B. Establish procedures and collect data necessary to determine annual investment levels in roads and bridges consistent with the requirements of the data model used for annual reporting to the State Transportation Commission. (Begin for federal-aid eligible system September 2004; begin for entire road system September 2005)**
- C. Determine the procedures necessary to identify the cost, type, and location/extent of planned 3-year road and bridge improvements. (Complete by September 2004)**

III. SUPPORTING ASSET MANAGEMENT TOOLS & PROCEDURES

- A. Adopt a statement that defines the principles of asset management for Michigan's roads and bridges. This should address the basic procedures that will be followed by the TAMC in reporting to the State Transportation Commission as well as basic**

procedures that are recommended for individual road agencies to follow. (Complete by July 2004)

- A1. Identify the key components/activities of an asset management process
- A2. Develop a list of key activities based upon most recent research
- A3. Review various tools currently being used for asset management and identify those which are cost effective and efficient for use by local, regional, and state agencies.
- A4. Identify a variety of software that an individual agency could utilize to conduct an asset management process
- A5. Set a target for the percentage of road agencies utilizing an asset management process by a given date

B. Select a computer model capable of forecasting future system conditions on Michigan's roads and bridges based upon surveyed conditions and reported improvements. The model must be capable of testing various scenarios for improvement type and levels of investment. (Complete by January 2005)

- B1. Staff presents information and data requirements on current models to the Strategic Analysis Committee.
- B2. Strategic Analysis Committee selects models to test.
- B3. Testing of models and review of results by Strategic Analysis Committee.
- B4. Strategic Analysis Committee makes recommendation to Transportation Asset Management Council.
- B5. TAMC selects model

C. Support the development of a baseline "best practice" procedure designed to assist individual road agencies with development of annual and multi-year road and bridge improvement programs that incorporates the principles of asset management by the TAMC. (Complete by January 2005)

- C1. Investigate other available tools and procedures that are consistent with the principles of asset management identified by the TAMC.
- C2. Review survey completed last year for appropriate information regarding this work item.
- C3. Document tools and procedures currently being implemented by various road agencies in Michigan.
- C4. Review information with local agencies for input and revision, as necessary.

D. Demonstrate the use of asset management principles and procedures for developing road and bridge improvement programs including effective and innovative methods to involve citizens and elected/appointed officials. (Start July 2004; complete by January 2006)

- D1. Highlight local success stories and procedures through Annual Report and regional newsletters.
- D2. Review national publications and share appropriate information and stories with regional planning agencies and MPOs for dissemination to local and state road agencies.

IV. PROVIDE EDUCATION & TRAINING

- A. Develop an annual education and training program in coordination with the state's MPOs/RPAs on the following:**
- 1. Pavement condition survey procedures (beginning with PASER)**
 - 2. Data requirements and reporting procedures for completed and planned (3-year) road and bridge improvements**
 - 3. Benefits of asset management with instructions on the procedures for developing multi-year road improvement programs (Complete by January 2005)**
- A1. Test NHI Course on Asset Management for applicability of being used at the local level
- A2. Conduct training seminars/conferences on asset management
- A3. Investigate the possibility of working through the Local Technical Assistance Program (LTAP) for training activities.
- B. Establish the state's MPOs/RPAs as the resource/support agencies for condition surveys, collection of investment information, and assistance to local transportation agencies to develop multi-year program using the principles and procedures of asset management. (On-going)**
- B1. Administrative & Education Committee identifies specific activities to be undertaken by the MPOs/RPAs
- B2. Staff reviews activities with MAR and 3C Board of Directors and reports to committee, committee modifies as needed
- B3. TAMC approves committee recommendation
- B4. Staff includes adopted activities in Unified Work Program
- B5. Staff monitors completion of work items and reports to committee
- B6. Administrative & Education Committee reviews and modifies as necessary
- C. Provide timely materials and information to key stakeholder groups and local road agencies. (On-going)**
- C1. Maintain web site
- C2. Provide quarterly reports on TAMC activities
- C3. Develop or purchase video on asset management
- D. Establish a process for developing and selecting pilot projects that will assist the TAMC in achieving its goals and objectives. (Complete selection process by July 2004; issue a call for projects September 2004; on-going)**
- D1. Submit draft proposal to Administrative & Education Committee
- D2. Submit to TAMC for approval
- D3. Issue a call for proposals
- D4. Review proposals received
- D5. Submit recommended proposals to appropriate TAMC committee
- D6. Submit recommended proposals to TAMC for approval
- D7. Set up contracts with agencies

V. DEVELOP AND MAINTAIN A SPIRIT OF COOPERATION AMONGST ROAD AGENCIES

A. Maintain ongoing communication with the State Transportation Commission and key stakeholder groups. (On-going)

- A1. Develop a quarterly report on TAMC activities
- A2. Establish “liaison” with Asset Management Action Team
- A3. Meet at least once a year with the directors of the groups represented on the TAMC

B. Conduct studies and data collection efforts through coordination and collaboration among state and local road agencies. (Complete by January 2006)

- B1. Conduct data collection in teams of state, city, county and regional personnel
- B2. Submit data and reporting requirements for review to a group of local agency individuals
- B3. Determine and test key asset management elements such as:
 - 1. Deterioration rates
 - 2. Average cost of specific fixes
 - 3. Fix lives and optimum times to apply a particular fix

C. Provide an asset management presence at annual conferences of the MML, CRAM, MAR/3C, APWA, MAC, MTA. (On-going)

- C1. Develop standardized presentation that can be used at each conference
- C2. Establish a TAMC Speakers Bureau
- C3. Attend conferences.

VI. MANAGEMENT OF THE TRANSPORTATION ASSET MANAGEMENT PROGRAM

A. Adopt the content and format for the Annual Report to the State Transportation Commission and Legislature. Consideration should be given to the following elements:

- Existing condition of roads and bridges by functional classification categories (state and sub-regions)
- Existing and planned investments in roads and bridges (“)
- Projected condition of roads and bridges based upon current funding levels and planned investments (“)
- Analysis of alternative investments and funding level classification (“)
- Recommended system condition goals by functional classification categories (“)
- Recommended best practice tools and procedures that advance the principles of asset management adopted by the TAMC.
- Description of the TAMC program for education and training in asset management to the various transportation agencies of Michigan. (Complete by April of each year.)

- A1. Submit draft outline to Administrative & Education Committee for review

- A2. Submit draft outline to TAMC for approval
 - A3. Submit draft report to TAMC for review and approval
 - A4. Revise as necessary and resubmit for approval
 - A5. Submit to STC and Legislature (by May 2)
- B. Staff will manage the on-going activities of the TAMC in a manner that is technically sound, objective, cooperative, open, and simple to communicate. (On-going)**
- B1. Provide agendas, materials, and minutes in a timely manner
 - B2. Provide monthly report to members and STC
 - B3. Manage contracts established by the TAMC
 - B4. Attend committee and council meetings, and other meetings as requested by members
- C. Develop annual budget. (Complete by August of each year)**
- C1. Develop draft budget and submit to Administrative & Education Committee for review
 - C2. Submit draft budget to TAMC for approval
 - C3. Submit approved draft budget to STC for approval
 - C4. Submit approved budget to MDOT Finance for inclusion in department budget
- D. Establish the Center for Geographic Information as the central data agency required by Act 499 of 2002. (On-going)**
- D1. Develop list of activities/work items to be undertaken by CGI
 - D2. Set up contractual arrangements with Michigan Dept. of Information Technology.
 - D3. Data Management Committee issues specific work orders
 - D4. Data Management Committee reviews billings and authorizes payments
 - D5. Data Management Committee/TAMC receives and review monthly progress reports from CGI
- VII. OTHER ACTIVITIES**
- A. Consider establishing the Technical Advisory Panel as permitted by Act 499 of 2002. (Complete by October 2004)**
- A1. Staff prepares report to TAMC on possible activities for the Technical Advisory Panel
 - A2. TAMC considers possible activities of the Technical Advisory Panel.
 - A3. TAMC determines activity and membership
 - A4. Chairman contacts agencies and requests agency to name a representative
 - A5. Upon receiving list of representatives Chairman calls first meeting
- B. Maintain liaison with state and national organizations involved in asset management. (On-going)**
- B1. Establish liaison with Asset Management Action Team
 - B2. Participate in state and national conferences

- C. Establish set of performance measures for use in asset management.** (Complete by January 2006)
- D. Determine means of educating public and elected officials on transportation funding.**
- E. Review current definition of “maintenance.”** (Complete by September 2004)
 - E1. Review current definition of maintenance with TAMC.